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## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently amended) A <u>transmitting</u> communication equipment comprising:

an aggregator for aggregating information based on user service requirements and for transmitting the aggregated information <u>as an aggregated packet to a receiving communication equipment, said receiving equipment having a de-aggregator for de-aggregating the aggregated packet.</u>

wherein a size of the aggregated packet is based at least in part on a negotiation between the transmitting communication equipment and the receiving communication equipment.

- 2. (Currently amended) The <u>transmitting</u> communication equipment of claim 1 where the aggregating of the information is further based on allowed transmission rate wherein the size of the aggregated packet is further based at least in part on channel conditions of a communication channel used for transmitting the aggregated packet between the transmitting communication equipment and the receiving communication equipment.
- 3. (Currently amended) The <u>transmitting</u> communication equipment of claim—1 where the aggregator has an input for coupling to a first buffer 2 wherein:

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the channel conditions are monitored on an ongoing basis during communications between the transmitting communication equipment and the receiving communication equipment; and

a size of each of a plurality of aggregated packets transmitted from the transmitting communication equipment to the receiving communication equipment is based at least in part on the channel conditions at the time when the aggregated packets are generated.

4. (Currently amended) The <u>transmitting</u> communication equipment of claim-3 where 1 wherein:

the aggregator has an input for coupling to a first buffer; and
the first buffer receives information from a terminal equipment from
which said first buffer retrieves the information if the <u>transmitting</u>
communication equipment operates in a terminal mode and the first buffer
receives information from equipment other than <u>the</u> terminal <u>equipment</u> if the
<u>transmitting</u> communication equipment operates in a relay mode.

- 5. (Currently amended) The <u>transmitting</u> communication equipment of claim 4 where the first buffer retrieves the information in accordance with time delay requirements of the information.
- 6. (Currently amended) The <u>transmitting</u> communication equipment of claim—3 where 4 wherein the aggregated information from the aggregator is fed to a second buffer coupled to an output of the aggregator for outputting the information in accordance with time delay requirements of the information.

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7. (Currently amended) The <u>transmitting</u> communication equipment of claim 1 where the user service requirements are related to quality of service provided to users of a communication system within which the equipment is being used.

- 8. (Currently amended) The <u>transmitting</u> communication equipment of claim 1 where the information comprises real time information.
- 9. (Currently amended) The <u>transmitting</u> communication equipment of claim 1 where the aggregator performs channel coding and modulation on the aggregated information.
- 10. (Currently amended) A <u>receiving</u> communication equipment comprising:

a de-aggregator for de-aggregating <u>aggregated data packets</u> received <u>from a transmitting communication equipment</u>,

wherein the receiving communication equipment negotiates with the transmitting communication equipment for determining a size of one or more of the aggregated data packets, said aggregated data packets being information aggregated based on user service requirements.

11. (Currently amended) The <u>receiving</u> communication equipment of claim
10 where the de-aggregator transfers <u>information from</u> the de-aggregated

<u>aggregated data packets received information</u> in accordance to time delay
requirements of the information to a terminal equipment, if the <u>receiving</u>

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communication equipment operates in a terminal mode mode, and the deaggregated information is transferred to equipment other than terminal equipment if the receiving communication equipment operates in a relay mode.

- 12. (Currently amended) The <u>receiving</u> communication equipment of claim 10 where the de-aggregator has an input for coupling to a first buffer and an output for coupling to a second buffer.
- 13. (Currently amended) The <u>receiving</u> communication equipment of claim
  12 where the de-aggregator provides the de-aggregated information <u>from the</u>
  de-aggregated aggregated data packets to the <u>first second</u> buffer for
  outputting such information in accordance with the time delay requirements of
  the <u>received</u> information.
- 14. (Currently amended) The <u>receiving</u> communication equipment of claim

  12 where the de aggregator has an input coupled to a second buffer 10

  wherein the size of said one or more of the aggregated data packets is further

  based at least in part on channel conditions of a communication channel used

  for transmitting the aggregated packets between the transmitting

  communication equipment and the receiving communication equipment.

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15. (Currently amended) A method of transmitting information, the method comprising the steps of: step of:

aggregating at least a portion of information a plurality of data packets into a plurality of aggregated data packets based on user service requirements, said data packets being aggregated at a transmitting node having an aggregator; and

transmitting the aggregated data packets over a communication

channel from the transmitting node to a receiving node, said receiving node

having a de-aggregator,

wherein the transmitting node and the receiving node communicate for determining a size of one or more of the plurality of aggregated data packets.

16. (Currently amended) The method of claim 15 where the information is encoded prior to being aggregated wherein:

at least one of the receiving node and the transmitting node monitors

channel conditions of the communication channel; and

the size of one or more of the plurality of aggregated data packets is based at least in part on the monitored channel conditions.

17. (Currently amended) The method of claim 15 further comprising the step of buffering the aggregated information 16 wherein the size of each aggregated data packet is determined based at least in part on the channel conditions at the time when the aggregated data packet is generated.

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18. (Currently amended) The method of claim <del>17 where 15 further</del> comprising:

<u>buffering the aggregated data packets, wherein</u> the buffered aggregated <u>information is data packets are outputted in accordance with timing delay requirements of the aggregated data packets information.</u>

- 19. (Currently amended) The method of claim 15 where the step of aggregating the information data packets further comprises channel coding the information data packets.
- 20. (Currently amended) A method for receiving communicating information over a communication channel, the method comprising the steps of: step of:

receiving a plurality of data packets at a transmitting node, said data packets being associated with an end user;

aggregating at least a subset of the plurality of data packets into an aggregated data packet, wherein a size of the aggregated data packet is determined through a negotiation between the transmitting node and a receiving node based at least in part on user service requirements associated with at least one of the end user, the communication channel, and the data packets; and

transmitting said aggregated data packet over the communication

channel to the receiving node, for de-aggregation of the aggregated data

packet at the receiving node de-aggregating received information where such information is aggregated based on user service requirements.

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21. (Currently amended) The method of claim 20 further comprising the steps of: step of

at the receiving node, de-aggregating the aggregated data packet to
form a plurality of de-aggregated data packets, said de-aggregated data
packets corresponding to the data packets previously aggregated into the
aggregated data packet at the transmitting node; and

buffering the de-aggregated data packets information.

22. (Currently amended) The method of claim 21 where the buffered deaggregated data packets are information is outputted in accordance with time delay requirements of the de-aggregated data packets information.